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Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2011; month=3; day=8; hr=6; min=43; sec=28; ms=690;]

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Application No: 10552291

Version No: 2.0

Input Set:

Output Set:

Started: 2011-03-07 16:54:26.216

Finished: 2011-03-07 16:54:32.175

Elapsed: 0 hr(s) 0 min(s) 5 sec(s) 959 ms

Total Warnings: 47

Total Errors: 0

No. of SeqIDs Defined: 57

Actual SeqID Count: 57

| Error code | Error Description |
|------------|---|
| W 213 | Artificial or Unknown found in <213> in SEQ ID (11) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (12) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (13) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (14) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (15) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (16) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (17) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (18) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (19) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (20) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (21) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (22) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (23) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (24) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (25) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (26) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (27) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (28) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (29) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (30) |

Input Set:

Output Set:

Started: 2011-03-07 16:54:26.216
Finished: 2011-03-07 16:54:32.175
Elapsed: 0 hr(s) 0 min(s) 5 sec(s) 959 ms
Total Warnings: 47
Total Errors: 0
No. of SeqIDs Defined: 57
Actual SeqID Count: 57

Error code

Error Description

This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> REGEN Biotech, Inc.

<120> Use of a peptide that interacts with alpha v beta3 integrin of endothelial cell

<130> OP04-1024

<140> 10552291

<141> 2005-10-03

<150> KR 10-2003-0021065

<151> 2003-04-03

<160> 57

<170> KopatentIn 1.71

<210> 1

<211> 683

<212> PRT

<213> Homo sapiens

<400> 1

Met Ala Leu Phe Val Arg Leu Leu Ala Leu Ala Leu Ala Leu Leu
 1 5 10 15

Gly Pro Ala Ala Thr Leu Ala Gly Pro Ala Lys Ser Pro Tyr Gln Leu
 20 25 30

Val Leu Gln His Ser Arg Leu Arg Gly Arg Gln His Gly Pro Asn Val
 35 40 45

Cys Ala Val Gln Lys Val Ile Gly Thr Asn Arg Lys Tyr Phe Thr Asn
 50 55 60

Cys Lys Gln Trp Tyr Gln Arg Lys Ile Cys Gly Lys Ser Thr Val Ile
 65 70 75 80

Ser Tyr Glu Cys Cys Pro Gly Tyr Glu Lys Val Pro Gly Glu Lys Gly
 85 90 95

Cys Pro Ala Ala Leu Pro Leu Ser Asn Leu Tyr Glu Thr Leu Gly Val
 100 105 110

Val Gly Ser Thr Thr Thr Gln Leu Tyr Thr Asp Arg Thr Glu Lys Leu
 115 120 125

Arg Pro Glu Met Glu Gly Pro Gly Ser Phe Thr Ile Phe Ala Pro Ser
 130 135 140

Asn Glu Ala Trp Ala Ser Leu Pro Ala Glu Val Leu Asp Ser Leu Val
 145 150 155 160

Ser Asn Val Asn Ile Glu Leu Leu Asn Ala Leu Arg Tyr His Met Val
 165 170 175

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Arg | Arg | Val | Leu | Thr | Asp | Glu | Leu | Lys | His | Gly | Met | Thr | Leu | Thr | 180 | 185 | 190 |
| Ser | Met | Tyr | Gln | Asn | Ser | Asn | Ile | Gln | Ile | His | His | Tyr | Pro | Asn | Gly | 195 | 200 | 205 |
| Ile | Val | Thr | Val | Asn | Cys | Ala | Arg | Leu | Leu | Lys | Ala | Asp | His | His | Ala | 210 | 215 | 220 |
| Thr | Asn | Gly | Val | Val | His | Leu | Ile | Asp | Lys | Val | Ile | Ser | Thr | Ile | Thr | 225 | 230 | 235 |
| Asn | Asn | Ile | Gln | Gln | Ile | Ile | Glu | Ile | Glu | Asp | Thr | Phe | Glu | Thr | Leu | 245 | 250 | 255 |
| Arg | Ala | Ala | Val | Ala | Ala | Ser | Gly | Leu | Asn | Thr | Met | Leu | Glu | Gly | Asn | 260 | 265 | 270 |
| Gly | Gln | Tyr | Thr | Leu | Leu | Ala | Pro | Thr | Asn | Glu | Ala | Phe | Glu | Lys | Ile | 275 | 280 | 285 |
| Pro | Ser | Glu | Thr | Leu | Asn | Arg | Ile | Leu | Gly | Asp | Pro | Glu | Ala | Leu | Arg | 290 | 295 | 300 |
| Asp | Leu | Leu | Asn | Asn | His | Ile | Leu | Lys | Ser | Ala | Met | Cys | Ala | Glu | Ala | 305 | 310 | 315 |
| Ile | Val | Ala | Gly | Leu | Ser | Val | Glu | Thr | Leu | Glu | Gly | Thr | Thr | Leu | Glu | 325 | 330 | 335 |
| Val | Gly | Cys | Ser | Gly | Asp | Met | Leu | Thr | Ile | Asn | Gly | Lys | Ala | Ile | Ile | 340 | 345 | 350 |
| Ser | Asn | Lys | Asp | Ile | Leu | Ala | Thr | Asn | Gly | Val | Ile | His | Tyr | Ile | Asp | 355 | 360 | 365 |
| Glu | Leu | Leu | Ile | Pro | Asp | Ser | Ala | Lys | Thr | Leu | Phe | Glu | Leu | Ala | Ala | 370 | 375 | 380 |
| Glu | Ser | Asp | Val | Ser | Thr | Ala | Ile | Asp | Leu | Phe | Arg | Gln | Ala | Gly | Leu | 385 | 390 | 395 |
| Gly | Asn | His | Leu | Ser | Gly | Ser | Glu | Arg | Leu | Thr | Leu | Leu | Ala | Pro | Leu | 405 | 410 | 415 |
| Asn | Ser | Val | Phe | Lys | Asp | Gly | Thr | Pro | Pro | Ile | Asp | Ala | His | Thr | Arg | 420 | 425 | 430 |
| Asn | Leu | Leu | Arg | Asn | His | Ile | Ile | Lys | Asp | Gln | Leu | Ala | Ser | Lys | Tyr | 435 | 440 | 445 |
| Leu | Tyr | His | Gly | Gln | Thr | Leu | Glu | Thr | Leu | Gly | Gly | Lys | Lys | Leu | Arg | 450 | 455 | 460 |
| Val | Phe | Val | Tyr | Arg | Asn | Ser | Leu | Cys | Ile | Glu | Asn | Ser | Cys | Ile | Ala | 465 | 470 | 475 |
| | | | | | | | | | | | | | | | | | | 480 |

Ala His Asp Lys Arg Gly Arg Tyr Gly Thr Leu Phe Thr Met Asp Arg
 485 490 495

Val Leu Thr Pro Pro Met Gly Thr Val Met Asp Val Leu Lys Gly Asp
 500 505 510

Asn Arg Phe Ser Met Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr
 515 520 525

Glu Thr Leu Asn Arg Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn
 530 535 540

Glu Ala Phe Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly
 545 550 555 560

Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu
 565 570 575

Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu
 580 585 590

Gln Gly Asp Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val
 595 600 605

Asn Lys Glu Pro Val Ala Glu Pro Asp Ile Met Ala Thr Asn Gly Val
 610 615 620

Val His Val Ile Thr Asn Val Leu Gln Pro Pro Ala Asn Arg Pro Gln
 625 630 635 640

Glu Arg Gly Asp Glu Leu Ala Asp Ser Ala Leu Glu Ile Phe Lys Gln
 645 650 655

Ala Ser Ala Phe Ser Arg Ala Ser Gln Arg Ser Val Arg Leu Ala Pro
 660 665 670

Val Tyr Gln Lys Leu Leu Glu Arg Met Lys His
 675 680

<210> 2
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2
 Gly Pro Gly Ser Phe Thr Ile Phe Ala Pro Ser Asn Glu Ala Trp Ala
 1 5 10 15

Ser Leu Pro Ala Glu Val Leu Asp Ser Leu Val Ser Asn Val Asn Ile
 20 25 30

Glu Leu Leu Asn Ala Leu Arg Tyr His Met Val Gly Arg Arg Val Leu
 35 40 45

Thr Asp Glu Leu Lys His Gly Met Thr Leu Thr Ser Met Tyr Gln Asn

50

55

60

Ser Asn Ile Gln Ile His His Tyr Pro Asn Gly Ile Val Thr Val Asn
65 70 75 80

Cys Ala Arg Leu Leu Lys Ala Asp His His Ala Thr Asn Gly Val Val
85 90 95

His Leu Ile Asp Lys Val Ile
100

<210> 3
<211> 131
<212> PRT
<213> Homo sapiens

<400> 3
Asn Ile Gln Gln Ile Ile Glu Ile Glu Asp Thr Phe Glu Thr Leu Arg
1 5 10 15

Ala Ala Val Ala Ala Ser Gly Leu Asn Thr Met Leu Glu Gly Asn Gly
20 25 30

Gln Tyr Thr Leu Leu Ala Pro Thr Asn Glu Ala Phe Glu Lys Ile Pro
35 40 45

Ser Glu Thr Leu Asn Arg Ile Leu Gly Asp Pro Glu Ala Leu Arg Asp
50 55 60

Leu Leu Asn Asn His Ile Leu Lys Ser Ala Met Cys Ala Glu Ala Ile
65 70 75 80

Val Ala Gly Leu Ser Val Glu Thr Leu Glu Gly Thr Thr Leu Glu Val
85 90 95

Gly Cys Ser Gly Asp Met Leu Thr Ile Asn Gly Lys Ala Ile Ile Ser
100 105 110

Asn Lys Asp Ile Leu Ala Thr Asn Gly Val Ile His Tyr Ile Asp Glu
115 120 125

Leu Leu Ile
130

<210> 4
<211> 129
<212> PRT
<213> Homo sapiens

<400> 4
Pro Asp Ser Ala Lys Thr Leu Phe Glu Leu Ala Ala Glu Ser Asp Val
1 5 10 15

Ser Thr Ala Ile Asp Leu Phe Arg Gln Ala Gly Leu Gly Asn His Leu
20 25 30

Ser Gly Ser Glu Arg Leu Thr Leu Leu Ala Pro Leu Asn Ser Val Phe
 35 40 45
 Lys Asp Gly Thr Pro Pro Ile Asp Ala His Thr Arg Asn Leu Leu Arg
 50 55 60
 Asn His Ile Ile Lys Asp Gln Leu Ala Ser Lys Tyr Leu Tyr His Gly
 65 70 75 80
 Gln Thr Leu Glu Thr Leu Gly Gly Lys Lys Leu Arg Val Phe Val Tyr
 85 90 95
 Arg Asn Ser Leu Cys Ile Glu Asn Ser Cys Ile Ala Ala His Asp Lys
 100 105 110
 Arg Gly Arg Tyr Gly Thr Leu Phe Thr Met Asp Arg Val Leu Thr Pro
 115 120 125
 Pro

<210> 5
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 5
 Met Gly Thr Val Met Asp Val Leu Lys Gly Asp Asn Arg Phe Ser Met
 1 5 10 15
 Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr Glu Thr Leu Asn Arg
 20 25 30
 Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn Glu Ala Phe Arg Ala
 35 40 45
 Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys Glu Leu
 50 55 60
 Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val Ser Gly
 65 70 75 80
 Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp Lys Leu
 85 90 95
 Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu Pro Val
 100 105 110
 Ala Glu Pro Asp Ile Met Ala Thr Asn Gly Val Val His Val Ile Thr
 115 120 125
 Asn Val Leu
 130

<210> 6
 <211> 85
 <212> PRT
 <213> Homo sapiens

 <400> 6
 Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys
 1 5 10 15

 Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val
 20 25 30

 Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp
 35 40 45

 Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu
 50 55 60

 Pro Val Ala Glu Pro Asp Ile Met Ala Thr Asn Gly Val Val His Val
 65 70 75 80

 Ile Thr Asn Val Leu
 85

<210> 7
 <211> 119
 <212> PRT
 <213> Homo sapiens

 <400> 7
 Met Gly Thr Val Met Asp Val Leu Lys Gly Asp Asn Arg Phe Ser Met
 1 5 10 15

 Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr Glu Thr Leu Asn Arg
 20 25 30

 Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn Glu Ala Phe Arg Ala
 35 40 45

 Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys Glu Leu
 50 55 60

 Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val Ser Gly
 65 70 75 80

 Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp Lys Leu
 85 90 95

 Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu Pro Val
 100 105 110

 Ala Glu Pro Asp Ile Met Ala
 115

<210> 8

<211> 113
<212> PRT
<213> Homo sapiens

<400> 8
Met Gly Thr Val Met Asp Val Leu Lys Gly Asp Asn Arg Phe Ser Met
1 5 10 15
Leu Val Ala Ala Ile Gln Ser Ala Gly Leu Thr Glu Thr Leu Asn Arg
20 25 30
Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn Glu Ala Phe Arg Ala
35 40 45
Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys Glu Leu
50 55 60
Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val Ser Gly
65 70 75 80
Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp Lys Leu
85 90 95
Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu Pro Val
100 105 110
Ala

<210> 9
<211> 73
<212> PRT
<213> Homo sapiens

<400> 9
Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys
1 5 10 15
Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val
20 25 30
Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp
35 40 45
Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu
50 55 60
Pro Val Ala Glu Pro Asp Ile Met Ala
65 70

<210> 10
<211> 67
<212> PRT
<213> Homo sapiens

<400> 10
 Arg Ala Leu Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly Asp Ala Lys
 1 5 10 15
 Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu Ile Leu Val
 20 25 30
 Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys Ser Leu Gln Gly Asp
 35 40 45
 Lys Leu Glu Val Ser Leu Lys Asn Asn Val Val Ser Val Asn Lys Glu
 50 55 60
 Pro Val Ala
 65

<210> 11
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> D-IV-AA(18)

<400> 11
 Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala Ile Gly Asp Glu Ile Leu
 1 5 10 15

Val Ser

<210> 12
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> D-IV-L(18)

<400> 12
 Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ile Gly Asp Glu Ile Leu
 1 5 10 15

Val Ser

<210> 13
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>

<223> D-IV-R(18)

<400> 13

Lys Glu Leu Ala Asn Ile Leu Lys Tyr His Ser Gly Asp Glu Ser Ser
1 5 10 15

Val Ser

<210> 14

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> D-IV-LYHR(18)

<400> 14

Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ser Gly Asp Glu Ser Ser
1 5 10 15

Val Ser

<210> 15

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> D-IV-LAA(18)

<400> 15

Lys Glu Ser Ala Asn Ser Ser Lys Ala Ala Ile Gly Asp Glu Ile Leu
1 5 10 15

Val Ser

<210> 16

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> D-IV-AAR(18)

<400> 16

Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala Ser Gly Asp Glu Ser Ser
1 5 10 15

Val Ser

<210> 17
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> D-IV-AA

<400> 17
Gly Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala Ile Gly Asp
1 5 10 15
Glu Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg
20 25

<210> 18
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> D-IV-L

<400> 18
Gly Asp Ala Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ile Gly Asp
1 5 10 15
Glu Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg
20 25

<210> 19
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> D-IV-R

<400> 19
Gly Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Tyr His Ser Gly Asp
1 5 10 15
Glu Ser Ser Val Ser Gly Gly Ile Gly Ala Leu Val Arg
20 25

<210> 20
<211> 29

<212> PRT
<213> Artificial Sequence

<220>
<223> D-IV-LYHR

<400> 20
Gly Asp Ala Lys Glu Ser Ala Asn Ser Ser Lys Tyr His Ser Gly Asp
1 5 10 15
Glu Ser Ser Val Ser Gly Gly Ile Gly Ala Leu Val Arg
20 25

<210> 21
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> D-IV-LAA

<400> 21
Gly Asp Ala Lys Glu Ser Ala Asn Ser Ser Lys Ala Ala Ile Gly Asp
1 5 10 15
Glu Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg
20 25

<210> 22
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> D-IV-AAR

<400> 22
Gly Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Ala Ala S